PATENT DOCKET NO: 99-466

## What is claimed:

1. A system having a random source adaptable for distributing a random bit stream over a network, said system comprising:

an input interface coupled to the random source for receiving a random data stream from the random source and outputting the random bit stream;

a processor for receiving the random bit stream from the input interface and outputting the random bit stream in a machine-readable form;

a memory coupled to the processor for storing machine-readable instructions used by the processor for formatting the random bit stream into a machine-readable form; and a network connection coupled to the processor for making the random bit stream available to a network.

- 2. The system according to claim 1, wherein the input interface includes an analog-to-digital converter for converting the random source data into a digital signal.
- 3. The system according to claim 1, wherein the processor for receiving the random bit stream comprises:
  - a first processor; and
  - a second processor communicatively coupled to said first processor.
- 4. The system according to claim 3, wherein the first processor and second processor share said memory.

- 5. They system according to claim 1, wherein the network connection communicates with an Internet protocol network.
- 6. The system according to claim 1, wherein the network connection communicates with a wireless network.
- 7. The system according to claim 1, wherein the memory stores accounting information about the random bit stream.
- 8. A method for generating random bits as a function of a random source and distributing the random bits over a network, the method comprising the steps of: collecting random data from a random source; processing the random data to produce a random bit stream in a machine-readable form;

providing the random bits to a network connection; and transmitting the random bits over the network.

- 9. The method of claim 8, further comprising the step of: generating random data.
- 10. The method of claim 8, further comprising the step of:
  receiving a random bit stream at a user location on the network.

- 11. The method of claim 8, further comprising the step of:validating a user account prior to transmitting the random bits over the network.
- 12. A distributed system for the production and distribution of random bits, the distributed system comprising:

a first random number source generating a first random data stream;

a second random number source generating a second random data stream;

an interface to the first random number source for receiving the first random data stream and the second random data stream, the interface outputting a random bit stream;

a processor for receiving the random bit stream from the interface, and for

formatting the random bit stream for distribution in a machine-readable form;

a network connection coupled to the processor for making the machine-readable

random bit stream available to a network; and

a memory coupled to the processor for storing machine-readable instructions used by the processor to format the random bit stream for distribution to the network connection.

- 13. A computer readable medium containing instructions for controlling at least one machine to perform a method for distributing random bits to a remote user, the method comprising the steps of:
  - converting a random data stream into a machine-readable random bit stream; providing the machine-readable random bit stream to a network connection; and transmitting the machine-readable random bit stream over a network.
- 14. A method for producing a random bit stream from a random source and offering the random bit stream to a remote user, the method comprising the steps of:

  processing the random bit stream to form a distributable random bit stream; and making the distributable random bit stream available to a remote user.
- 15. The method of claim 14, further comprising the step of:

  processing the random bit stream to ensure that successive bits are unbiased.
- 16. The method of claim 14, further comprising the step of:

  performing accounting operations on the random bit stream to ensure that the remote user is billed for the received random bit stream.
- 17. The method of claim 14, further comprising the step of:

  authorizing the remote user to receive the random bit stream prior to distributing
  the distributable random bit stream to the remote user.

- 18. The method of claim 14, further comprising the step of:confirming that the remote user has received the distributable random bit stream.
- 19. The method of claim 14, further comprising the step of: encapsulating the random bit stream.
- 20. A system for making random numbers available to a remote user in digital form, the system comprising:

a computer;

a display device communicatively coupled to the computer, the display device comprising:

a first window for displaying information about a random bit stream awaiting distribution over a network;

a second window for displaying diagnostic information regarding the random bit stream; and

a window manager for controlling the layout of, and communication of data to, the first window and the second window while present for viewing on the display device.

21. The system of claim 20 further comprising:

a third window, displayable on the display device, for communicating information to a remote computer.

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22. The system of claim 20 further comprising: an input device.